IN RE APPLICATION OF YVES DECOSTER
SUBSTITUTE SPECIFICATION PURSUANT TO 37 C.F.R. 1.125,
CLEAN VERSION WITHOUT MARKINGS

Seat occupancy detector

TECHNICAL FIELD OF INVENTION

The present invention generally relates to a seat occupancy detector e.g. for use in an automotive vehicle.

BRIEF DESCRIPTION OF RELATED ART

In modern vehicles, seat occupancy sensors are widely used in order to detect whether a passenger seat is occupied or not. The information about the occupancy of the passenger seat may then be used in order to control the deployment of one or more airbags associated to the passenger seat (the deployment is e.g. inhibited if the passenger seat is found to be non occupied) or in the triggering of a seat belt reminder.

The occupancy sensors usually comprise pressure sensing devices integrated in the respective passenger seat for detecting a pressure induced by the presence of a passenger into the seat. The pressure sensing devices, as e.g. disclosed in DE-A-42 37 072, comprise a plurality of individual force sensors, which are connected in a suitable manner to a control unit designed for measuring a pressure depending electrical property of said individual pressure sensors.

These occupancy sensors have proven to be very reliable and well adapted to the detection of seat occupancy. However one drawback of these occupancy sensors lies in the fact, that the pressure sensing device has to be physically connected to the control unit by means of connection wires in order to be functional. This need for physically connecting the sensing device to the control unit causes problems in modern cars equipped with a flexible seating system with removable and/or displaceable back seats.